From: Tom Darin

Rankin, Dennis - Washington, DC
SLV Transmission Project Scoping Comments Subject: Monday, September 21, 2009 2:04:06 PM Date: Attachments: FINAL scoping comments 9-21-09.pdf

FINAL - Appendix A.docx 090918Tri State SLV Transmission Sensitive Resource Clips,zip

Dear Mr. Rankin -

Please find attached our Scoping Comments, along with Appendix A, and a Zip file containing GIS data. The GIS data is also being sent today via US first class mail on a CD-ROM.

Thanks, and please confirm that you received and can open the attachments to this email.

Tom

Tom Darin Staff Attorney, Energy Transmission Western Resource Advocates 2260 Baseline Rd., Suite 200 Boulder, CO 80302

PH: 303-444-1188 ext. 244

FX: 303-786-8054

# Western Resource Advocates • Center for Native Ecosystems • Great Old Broads for Wilderness • The Wilderness Society • Natural Resources Defense Council

September 21, 2009

Delivered via electronic mail (dennis.rankin@wdc.usda.gov)

Dennis Rankin Environmental Protection Specialist USDA Rural Utilities Service 1400 Independence Avenue, SW (Stop 1571) Washington, DC 20250–1571

### Re: Scoping Comments on Proposed San Luis Valley Transmission Project

Dear Mr. Rankin:

### I. Introduction

Founded in 1989, Western Resources Advocates is a non-profit environmental law and policy organization dedicated to restoring and protecting the land, air, water, and wildlife resources within the interior Western United States. Specifically, our team of lawyers, policy analysts, and economists works to: (1) promote a clean energy future for the Interior West that reduces pollution and the threat of climate change; (2) restore degraded river systems, and encourage urban water providers to use existing water supplies more efficiently; and (3) protect public lands and wildlife throughout the region.

Western Resource Advocates and the undersigned groups appreciate the opportunity to provide scoping comments on the proposed transmission facilities between the San Luis Valley—
Calumet—Comanche substations (SLV Transmission Project). The facilities are jointly proposed by Tri-State Generation and Transmission Association, Inc. (Tri-State) and Public Service Company of Colorado (PSCo). Tri-State is requesting that Rural Utility Service (RUS) provide financial assistance for the proposed action, thereby triggering the requirements of the National Environmental Policy Act. The NEPA Scoping Notice states that the main purpose of the proposed action is to improve the overall electric system in a portion of Colorado and increase reliability for Tri-State and PSCo customers in the San Luis Valley.

Additionally, the Scoping Notice recognizes that the SLV Transmission Project would provide a transmission outlet for renewable energy generation in the San Luis Valley, which contains some of Colorado's best solar resources. These solar and other renewable energy resources need sufficient and expanded transmission access in order to be developed and delivered to Colorado customers, so that we may build a cleaner energy portfolio to achieve Colorado's New Energy Economy goals, gain greater price stability for consumers, and address climate change issues. However, if power lines and related generation facilities are planned, sited on constructed improperly, they could have unacceptable impacts on Colorado's outstanding land, water, and wildlife resources in the San Luis Valley region. Accordingly, we have been actively involved in the Colorado and the Interior West to ensure that proposed transmission projects that are necessary to connect renewable energy

resources are developed, and that this development proceeds in a manner that avoids and/or properly mitigates impacts on landscapes, wildlife and other natural resources in the West.

### **Smart Lines**

Transitioning Colorado to the New Energy Economy will be based, in large part, on the development of renewable energy resources, which will require significant expansion of the current transmission infrastructure. If the proper considerations for lands and wildlife protection are not taken into account, renewable energy transmission solutions will be impeded or unnecessarily delayed. Ensuring protection for Colorado's landscapes and wildlife is not only important for the continued vitality of these resources, but also critical for the successful transition to Colorado's New Energy Economy. In 2008, working with transmission planners, the renewable energy industry, and environmental groups, WRA developed its report Smart Lines: Transmission for the Renewable Energy Economy (www.westernresourceadvocates.org/energy/pdf/SmartLines\_Final.pdf).

N-004-001 In preparing the Environmental Impact Statement for the current project, we request that RUS examine how to best achieve the following Smart Line principles:

- Demand-side technologies first: Employ energy efficiency, distributed generation like rooftop solar and demand-side management technologies to reduce the amount of energy, and therefore transmission, needed to import from outlying generation sources.
- Maximize the existing grid through technical upgrades and utilizing existing power line, pipeline, railroad, and transportation rights-of-way to minimize impacts.
- Connect clean and renewable energy resources to move Colorado toward the New Energy Economy.
- Ensure long-lasting protection for public lands and wildlife resources. Early consideration of these factors, instead of at the end of transmission planning, is essential to direct projects to the best locations with the least environmental impacts.

## **Invite Cooperating and Coordinating Agencies**

NEPA emphasizes early cooperation amongst federal, state, and local agencies with jurisdiction or special expertise in a matter, particularly where joint planning or permitting processes are involved. N-004-002 See 40 C.F.R. §§ 1501.6; 1506.2. In the present case, we encourage RUS to invite the Bureau of Land Management, the U.S. Forest Service, the U.S. Fish & Wildlife Service, the Colorado Division of Wildlife, and Alamosa, Costilla, Huerfano, and Pueblo Counties to be cooperating or coordinating agencies. All of these entities have special expertise regarding environmental impacts associated with the proposed Project, all four counties will be involved in permitting the right-ofway for the facilities, and one or more of the federal agencies, depending on route selection, may have lands jurisdiction for part of the right-of-way. Lastly, BLM has special expertise and experience in permitting transmission facilities and will bring valuable insight to these proceedings.

### **Environmental Impact Statement**

The Project Scoping Notice states that an Environmental Assessment is being prepared to determine N-004-003 whether a full Environmental Impact Statement (EIS) is warranted. We request that RUS proceed now in preparing an EIS for this Project. We are mindful, however, that the lead time for transmission planning and construction is longer than the time it takes for new generation to come

2

# N-004-001: NEPA Process (In Review)

Your email/letter/comment form has been received and your comment noted. Tri-State Generation and Transmission Association, Inc. has requested financial assistance from the USDA Rural Utilities Service (RUS), for their anticipated ownership interest in the proposed San Luis Valley - Calumet - Comanche Transmission Project. RUS has determined that funding Tri-State's ownership interest is a federal action requiring analysis under the National Environmental Policy Act (NEPA). RUS is the lead federal agency for NEPA, and will consult with other federal, state, and local agencies, and affiliated tribes as well as adhere to applicable regulations.

Additional information regarding the NEPA process can be found on the RUS project website at http://www.usda.gov/rus/water/ees/environ.htm. The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-002: NEPA Process (In Review)

Your email/letter/comment form has been received and your comment noted. Tri-State Generation and Transmission Association, Inc. has requested financial assistance from the USDA Rural Utilities Service (RUS), for their anticipated ownership interest in the proposed San Luis Valley - Calumet - Comanche Transmission Project. RUS has determined that funding Tri-State's ownership interest is a federal action requiring analysis under the National Environmental Policy Act (NEPA). RUS is the lead federal agency for NEPA, and will consult with other federal, state, and local agencies, and affiliated tribes as well as adhere to applicable regulations.

Additional information regarding the NEPA process can be found on the RUS project website at http://www.usda.gov/rus/water/ees/environ.htm. The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

N-004-003 on line. Therefore, RUS should timely complete the EIS so as not to delay planned renewable energy generation facilities, including solar bids under PSCo's recent Request for Proposals, which are dependent on new transmission access.

N-004-004 An EIS is required when a proposed action will likely have significant impacts on the human environment. In the present Project, Tri-State and PSCo are proposing nearly 150 miles of high voltage transmission lines from the San Luis Valley, over the Sangre De Cristo mountains to a new Calumet substation north of Walsenburg, CO and then terminating at the Comanche substation near Pueblo, CO. In addition to Great Sand Dunes National Park in the Valley, world class mountain terrain and views, and numerous national wildlife refuges, the project area contains outstanding visual, wildlife, and natural resource attributes. Nearly 100 miles are proposed to be double-circuit 230 kV (San Luis Valley to Calumet) and 45 miles at double circuit 345 kV (Calumet to Comanche substations). The preliminary corridors for the new power lines average 2-3 miles in width and eventual rights-of-way will directly and permanently affect a 500 foot or great swath for the 150 miles. The power line towers are projected to range from 115 to 150 feet in height, and, in San Luis Valley itself, the proposed corridor alignment does not have existing power lines.

> Under these circumstances, with these natural resources at stake, the Project's potential impacts certainly qualify as "significant" on the human environment, and warrant a full EIS. As discussed below under "Cumulative and Connected Actions", the double-circuit 230 kV lines into the San Luis Valley could facilitate up to 800 MW of concentrating solar power generation. The cumulative lands, soils, vegetation, wildlife, and water impacts of this generation - that would be directly facilitated by the new power lines – underscores a finding of "significant." See 40 C.F.R. §§ 1508.27(b)(7); 1506.2.

> Finally, NEPA defines "significant" as not only the intensity of the proposed action and the unique

natural resources at issue, but also the extent to which the action "may establish a precedent for N-004-005 future actions with significant impacts." See 40 C.F.R. § 1508.27(b)(6). We ask that, in determining that an EIS is warranted, RUS consider the current political, public policy, and economic context in Colorado. This includes developing Colorado's New Energy Economy goals, which will require significant new transmission investments in rural Colorado areas, as well as the development of potentially thousands of megawatts of solar development. The power lines needed for renewable energy will be, in many cases, in rural and remote areas that presently do not have any transmission facilities. The new transmission investments to facilitate large-scale renewable energy projects – particularly in the case of utility scale solar projects – will cause new impacts to assess, disclose, avoid, and minimize through mitigation. In many respects the Project is the first of its kind: a large transmission project in rural Colorado that hasn't seen major transmission expansion in decades; there will be new impacts to rural locations that in many cases do not have existing high voltage transmission; and, the Project is intended to facilitate large-scale quantities of concentrating solar power. Therefore, the direct, indirect, and cumulative impacts of the proposed action are significant and precedent setting, and, therefore, deserving of an EIS.

N-004-006 Finally, NEPA provides RUS with a great deal of latitude in deciding to prepare a full Environmental Impact Statement. See 40 C.F.R. § 1501.3(b). Given that this Project is generating a fair amount of local and state-wide attention – in addition to the magnitude of direct, indirect, and cumulative impacts – RUS should save time and resources, and make an early determination to proceed with a full EIS to adequately assess, disclose, and develop mitigation strategies for environmental impacts. The EIS will also provide an opportunity to identify and assess reasonable

3

# N-004-003: NEPA Process (In Review)

Your email/letter/comment form has been received and your comment noted. Tri-State Generation and Transmission Association, Inc. has requested financial assistance from the USDA Rural Utilities Service (RUS), for their anticipated ownership interest in the proposed San Luis Valley - Calumet - Comanche Transmission Project. RUS has determined that funding Tri-State's ownership interest is a federal action requiring analysis under the National Environmental Policy Act (NEPA). RUS is the lead federal agency for NEPA, and will consult with other federal, state, and local agencies, and affiliated tribes as well as adhere to applicable regulations.

Additional information regarding the NEPA process can be found on the RUS project website at http://www.usda.gov/rus/water/ees/environ.htm. The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

# N-004-004: NEPA Process (In Review)

http://www.usda.gov/rus/water/ees/ea.htm.

Your email/letter/comment form has been received and your comment noted. Tri-State Generation and Transmission Association, Inc. has requested financial assistance from the USDA Rural Utilities Service (RUS), for their anticipated ownership interest in the proposed San Luis Valley - Calumet - Comanche Transmission Project. RUS has determined that funding Tri-State's ownership interest is a federal action requiring analysis under the National Environmental Policy Act (NEPA). RUS is the lead federal agency for NEPA, and will consult with other federal, state, and local agencies, and affiliated tribes as well as adhere to applicable regulations.

Additional information regarding the NEPA process can be found on the RUS project website at http://www.usda.gov/rus/water/ees/environ.htm. The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

N-004-006 alternatives to the proposed action in order to avoid or minimize adverse effects on the quality of the human environment. See 40 C.F.R. §§ 1502.16; 1501.4.

### V. Purpose and Need

NEPA requires that federal agencies "briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives." 40 C.F.R. § 1502.13. Consistent with WRA's N-004-007 Smart Line principles, we request that RUS analyze the extent to which Tri-State and PSCo are implementing energy efficiency, distributed generation, demand-side management, Smart Grid technologies, and other energy demand-reducing efforts that may impact the need for the proposed project. In 2006, the Western Governors' Association completed its Clean and Diversified Energy Initiative that included a task force report focused on transmission issues. See <a href="https://www.westgov.org/wga/initiatives/cdeac/TransmissionReport-final.pdf">www.westgov.org/wga/initiatives/cdeac/TransmissionReport-final.pdf</a>. The report contains a remarkable finding at page 9, that, if high, but achievable, levels of efficiency are reached in the region, this could result in eliminating 1,150 miles of a projected need for 4,000 miles — approximately 30% — of new power lines. Clearly, therefore, the Purpose and Need for this proposed project can be greatly informed by assessing the current and future role of demand-reducing technologies including efficiency and other similar energy-saving measures, as well as distributed resources, such as rooftop solar.

### VI. Range of Alternatives

A full and rigorous examination of environmental impacts for "all reasonable alternatives" is at the heart of an EIS. See 40 C.F.R. § 1502.14. RUS must explore alternative to the proposed Project that accomplish the same objectives of enhancing the grid system, improving reliability, and facilitating renewable energy development in San Luis Valley. Multiple right-of-way options to site the proposed transmission facilities must be examined. Importantly, environmental and cost tradeoffs between different alternatives must be fully evaluated, as well as avoidance and mitigation strategies that can be reasonably accomplished for the various routing alternatives. This will include detailed information on costs and benefits of the different alternatives and the alternatives' impacts on the overall performance of the electrical grid, including system reliability, and on improving transmission access for renewable resources in the San Luis Valley area.

### VII. Cumulative and Connected Actions

A. Conditioning Right-of-Way Approval on Facilitating Clean, Renewable Energy Resources

Our comments in section V and VI relate to WRA's first and second *Smart Lines* principles (demand-side resources and maximizing existing grid assets and developed corridors). WRA's third principle is to ensure that new transmission investments further strong public policy goals to connect clean, renewable energy generation, such as solar and wind resources, which will be the

4

# N-004-005: NEPA Process (In Review)

Your email/letter/comment form has been received and your comment noted. Tri-State Generation and Transmission Association, Inc. has requested financial assistance from the USDA Rural Utilities Service (RUS), for their anticipated ownership interest in the proposed San Luis Valley – Calumet - Comanche Transmission Project. RUS has determined that funding Tri-State's ownership interest is a federal action requiring analysis under the National Environmental Policy Act (NEPA). RUS is the lead federal agency for NEPA, and will consult with other federal, state, and local agencies, and affiliated tribes as well as adhere to applicable regulations.

Additional information regarding the NEPA process can be found on the RUS project website at http://www.usda.gov/rus/water/ees/environ.htm. The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-006: NEPA Process (In Review)

Your email/letter/comment form has been received and your comment noted. Tri-State Generation and Transmission Association, Inc. has requested financial assistance from the USDA Rural Utilities Service (RUS), for their anticipated ownership interest in the proposed San Luis Valley – Calumet - Comanche Transmission Project. RUS has determined that funding Tri-State's ownership interest is a federal action requiring analysis under the National Environmental Policy Act (NEPA). RUS is the lead federal agency for NEPA, and will consult with other federal, state, and local agencies, and affiliated tribes as well as adhere to applicable regulations.

Additional information regarding the NEPA process can be found on the RUS project website at http://www.usda.gov/rus/water/ees/environ.htm. The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

<sup>&</sup>lt;sup>1</sup> We note that substantial information on these issues is contained in a related proceeding before the Colorado Public Utility Commission where Tri-State and PSCo are requesting Certificates of Public Convenience and Necessity for the proposed transmission lines. WRA asks that RUS fully consider the public, non-privileged information available in the CO PUC Dockets No. 09A-324E and No. 09A-325E (2009) that relate to purpose and need, range of alternatives including proposed and alternate corridors, potential impacts, and mitigation strategies.

backbone for achieving the region's New Energy Economy, increasing the development of domestic energy resources, and reducing greenhouse emissions (GHG) to address climate change.

The EIS must account for cumulative and connected actions associated with the proposed transmission line. Under NEPA, RUS must take a "hard look" at the effects of proposed actions, including, "ecological, aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative." 40 C.F.R. § 1508.8. A cumulative impact may be "an impact on the environment that results from the incremental impact of the action when added to other past,

N-004-008 present, and reasonably foreseeable future actions." See 40 C.F.R. § 1508.7. Accordingly, RUS should account for any future possibility that the SLV Transmission Project carries non-renewable energy sources, such as coal, which produce greater GHG emissions. Cumulative and connected actions, such as potential benefits from reducing greenhouse gas emissions from electricity generation, decreased impacts from climate change, and potential economic impacts from additional infrastructure and reasonably foreseeable development of renewable energy generation plants, should be accounted for in the EIS. The analysis should consider the full-cycle impacts of the project including the manufacturing, construction, operation, decommissioning, and reclamation phases. The results of this analysis should then be compared to fossil-fuel based energy production, including combined-cycle natural gas and coal-fired power plants.

Federal case law underscores the responsibility of federal agencies to scrutinize reasonably foreseeable cumulative environmental impacts from carbon dioxide emissions involving coal-fired power generation through the NEPA review process. See Mid-states Coalition for Progress v.

Surface Transportation Board, 345 F.3d 520 (8th Cir. 2003) (finding NEPA violation by failing to consider emissions from increased coal consumption from new rail lines carrying coal); Border Power Plant Working Group v. Department of Energy, 260 F.Supp.2d 997 (S.D. Cal. 2003) (finding NEPA violation for failure to analyze reasonably foreseeable cumulative impacts from carbon dioxide with proposed transmission lines). In accordance with these decisions, and due to reasonably foreseeable GHG emissions and environmental impacts from power lines supporting coal-fired generation, RUS should consider allowing interconnection from only low-carbon generation (equal to or less than that of a combined-cycle natural gas fired power plant – roughly 1.100 lbs. of CO2 per megawatt-hour of produced energy).<sup>2</sup>

N-004-010 Federal precedent supports a GHG-based performance standard for the proposed Project. In <u>Border Power Plant</u>, the projects under immediate consideration for approval were federal rights-of-way to build power lines connecting coal power plants in Mexico with the power grid in southern California. To help ensure that the connecting power plants would have the least impacts on regional air quality, the plaintiffs in Border Power Plant advanced a novel theory: condition the right-of-way permits "on the commitment of the project proponents to implementation of state-of-the-art emissions control systems, mitigation through offsets in existing sources, and the use of dry cooling or parallel dry-wet cooling." <u>Border Power Plant</u>, 260 F.Supp.2d at 1029. The defendant permitting agencies argued that such a condition would frustrate the purpose and need of the proposed action, which only dealt with the construction of power lines in a right-of-way and not the operation of the connecting power plants.

5

# N-004-007: Purpose and Need (In Review)

Your email/letter/comment form has been received and your comment noted. Project purpose and need will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-008: Cumulative Impacts (In Review)

Your email/letter/comment card has been received and your comment noted. Potential cumulative impacts and mitigation measures will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-009: Project Alternatives (In Review)

Your email/letter/comment from has been received and your comment noted. A range of reasonable project alternatives and mitigation measures including the no action alternative will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-010: Environmental Consequences (In Review)

Your email/letter/comment form has been received and your comment noted. Potential environmental consequences and mitigation measures from the proposed project will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in

<sup>&</sup>lt;sup>2</sup> This standard is derived from the 2007 decision of the California Public Utilities Commission setting a green house gas performance standard for new long-term commitments for base-load energy generation serving California consumers. See "PUC Sets GHG Emissions Performance Standard to Help Mitigate Climate Change," ftp://ftp.cpuc.ca.gov/puc/energy/electric/climate+change/070125\_gbg\_standard\_fact\_sheet.pdf.

The court agreed with the plaintiffs, and its analysis is worth quoting in full:

Here, the scope of the action relates only to the transmission lines, but the nature of the action includes the full scope of the analysis, including the effects of the action. The nature of the action therefore includes the importation of power generation in Mexico. Indeed, to leave out the secondary impacts would be at odds with the purpose of the alternatives analysis, which is to provide a way for an agency to calculate and compare the various predicted effects of alternative courses of action. The analysis would be arbitrary in itself if it did not take into account all effects of a proposed action. Accordingly, defendants' arguments that they need not consider alternatives related to the [coal power plant] facilities fails.

Given this nature, the agencies were obligated to set forth in the EA 'the range of alternatives . . . sufficient to permit a reasoned choice.' Although defendants argue that 'international sensitivities' preclude conditioning the permits from being a reasonable and feasible alternative, such a discussion belongs in the EA's alternative analysis rather than a litigation brief.

Border Power Plant, 260 F.Supp.2d at 1030-31 (citations omitted).

N-004-011 Accordingly, there is judicial precedent that these types of NEPA approval processes should consider alternatives that place performance-based conditions on rights-of-way with a federal nexus. For the SLV Transmission Project, we ask RUS to develop this type of permit condition in order to ensure that Colorado's land resources are used to support a forward-thinking energy policy and further climate change solutions. A fuel-neutral, GHG performance standard is an appropriate condition for the use of the country's public and other highly valued lands to ensure that that a particular right-of-way and associated impacts will not result in future actions connecting polluting and carbon-heavy power sources to the electric grid.

### Impacts from Facilitated Renewable Energy Generation

N-004-012 The SLV Transmission Project will provide transmission access to wind and solar generation plants that would otherwise not be feasible. The EIS should analyze the potential cumulative impacts of any reasonably foreseeable development of these resources. In this regard, on the ground impacts are important to consider when assessing cumulative and connected actions. Table 1 summarizes the lands needed for various solar technologies. Assuming 8 acres of disturbance for 1 MW of concentrating solar power - and that double-circuit 230 kV can facilitate up to 800 MW new generation – the lands disturbance facilitated by this project (in addition to transmission facilities) N-004-013 may exceed 6,000 acres. Given the potential impacts, we ask RUS to give special attention to opportunities exist to utilize pre-existing roads or housing in close proximity to project locations to reduce or eliminate the need the impacts associated with new infrastructure.

6

late 2010 and will be available at http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-011: Environmental Consequences (In Review)

Your email/letter/comment form has been received and your comment noted. Potential environmental consequences and mitigation measures from the proposed project will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-012: Cumulative Impacts (In Review)

Your email/letter/comment card has been received and your comment noted. Potential cumulative impacts and mitigation measures will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-013: Project Alternatives (In Review)

Your email/letter/comment from has been received and your comment noted. A range of reasonable project alternatives and mitigation measures including the no action alternative will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

Table 1. Acres Per Megawatt of Generation Capacity<sup>3</sup>

Energy Source	Acres/MW
Solar-PV	2.47-12.36
Solar-CSP	5.0-12.33
Wind	24.71-50
Coal	0.35-1.1
IGCC Coal	1.31-2.36
Gas	0.29-0.41

Water is also a major concern. In San Luis Valley, the likely generation facilitated by the proposed Project will be concentrating solar power. RUS should examine the water needs of different technologies and assess the impacts on surface and groundwater resources, as well as any impacts to existing water rights held pursuant to Colorado law. Water use by power plant type is shown in Table 2.

Table 2. Water Use by Power Plant Type<sup>4</sup>

Power Plant Type	Water Use (Gallons/MWh)
Nuclear	620
Coal	670
Combined Cycle Natural Gas	250-300
Parabolic Tough (Wet Cooled) <sup>5</sup>	1,000
Parabolic Trough (Dry Cooled) <sup>5</sup>	80
Dish/Stirling	4.4
Photovoltaic (PV)	4.4

7

# N-004-014: Environmental Consequences (In Review)

Your email/letter/comment form has been received and your comment noted. Potential environmental consequences and mitigation measures from the proposed project will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at http://www.usda.gov/rus/water/ees/ea.htm.

See: PV FAQ's. U.S. Department of Energy, Energy Efficiency and Renewable Energy. National Renewable Energy Laboratory. (www.hubbertpeak.com/Apollo2/photovoltaics/HowMuchLandNREL.pdf): Concentrating Solar Power: From Research to Implementation. European Commission. European Communities, 2007. (ec.europa.eu/energy/res/publications/doc/2007 concertrating solar power en.pdf): Cure for the Common Coal: Can Wind Power Replace Traditional Fossil Power? Time2Time. June 3, 2008 (http://uva72.blogspot.com/2008/06/cure-for-common-coal-can-wind-power.html): Concentrating Solar Power. U.S. Department of Energy, Energy Efficiency and Renewable Energy. National Renewable Energy Laboratory. (http://solareis.anl.gov/documents/docs/NREL\_CSP\_l.pdf): Jonah Lamb. Killer Coal. Salt Lake City Weekly. May 3, 2007 (http://www.slweekly.com/index.cfm?do=article.details&id=1CA7B2DC-2BF4-55D0-F1FC484A425B4016); Final Site Selection Report. FutureGen Industrial Alliance, Inc. Submitted to Department of Energy, Dec. 18, 2007; Eleanor Charles. A Flurry of Proposals for Gas-Fired Power Plants. The New York Times. October 24, 1998 (http://query.nytimes.com/gst/fullpage.html?res=9507E6D8123DF937A15753C1A96E958260&sec=&spon=&pagewanted=all).

<sup>&</sup>lt;sup>4</sup> Fuel from the Sky: Solar Power's Potential from Western Energy Supply at p. 34, Dr. Arnold Leitner, Senior Consultant, RDI Consulting, NREL/SR-550-32160. July 2002. <a href="http://www.nrel.gov/csp/pdfs/32160.pdf">http://www.nrel.gov/csp/pdfs/32160.pdf</a>

<sup>&</sup>lt;sup>5</sup> U.S. Department of Energy, Energy Efficiency and Renewable Energy. "Cooling for Parabolic Trough Power Plants." 2006. <u>http://www.nrel.gov/csp/troughnet/pdfs/40025.pdf</u>

### VIII. Lands and Wildlife Protections

The development of large-scale transmission facilities will impact land, soils, vegetation, scenic and wildlife habitat resources. These impacts include direct impacts from road construction, siting of tower pads and support infrastructure, and potential for bird and bat collisions with towers and wires; as well as indirect impacts such as habitat fragmentation, increased predation from perching raptors, and viewshed impacts. In this final section, therefore, we highlight WRA's fourth Smart Line principle – that transmission for renewable energy must properly assess and avoid/minimize N-004-015 impacts to these natural resource values. In siting transmission facilities, it is crucial that RUS avoid sensitive lands, wildlife and other areas, maximize the use of existing corridors and minimize impacts by requiring best management practices.

### Areas to Avoid

RUS should identify critical areas to avoid in determining proposed and alternate routes for the SLV Transmission Project. Certain places are not appropriate for large-scale transmission lines and N-004-016 certain categories of lands should be avoided. Based on their important natural values and potential for damage from the construction, use and maintenance of transmission lines, we recommend that the EIS commit to not siting proposed and alternative routes on the following lands:

- Wilderness Areas;
- Wilderness Study Areas (WSAs);
- National Monuments:
- National Conservation Areas;
- Other lands within BLM's National Landscape Conservation System (NLCS), such as Outstanding Natural Areas:
- National Historic and National Scenic Trails;
- National Wild, Scenic, and Recreational Rivers, study rivers and segments, and eligible rivers and segments;
- Areas of Critical Environmental Concern (ACECs);
- Special Recreation Management Areas;
- Threatened, endangered and sensitive species habitat, as well as critical cores and linkages for wildlife habitat:
- 11. Citizen-proposed wilderness areas; and
- Other lands with wilderness characteristics.6 12.

N-004-017 In addition to the above federal lands areas, in consultation with state and local agencies and environmental groups – particularly local and Colorado-based groups with detailed and expert knowledge of the sensitive landscapes in play – RUS and the cooperating agencies should develop and select a preferred routing alternative that also avoids and minimizes impacts to important nonfederal landscapes, resources and viewsheds. Appendix A includes the results of a GIS analysis

8

# N-004-015: Route Refinement (In Review)

Your email/letter/comment form has been received and your comment noted. Route refinement for the proposed project and mitigation measures will be addressed in the Environmental Impact Statement. The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-016: Route Refinement (In Review)

Your email/letter/comment form has been received and your comment noted. Route refinement for the proposed project and mitigation measures will be addressed in the Environmental Impact Statement. The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-017: Public Involvement Process (In Review)

Your email/letter/comment form has been received and your comment noted. The project is in the planning and environmental review stages. Current project information will be available on the RUS project website, http://www.usda.gov/rus/water/ees/ea.htm and the Utilities' project website, http://www.socotransmission.com/.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

<sup>&</sup>lt;sup>6</sup> Lands that are included in pending legislation for designation in one of these 12 categories – or lands that would otherwise prohibit siting of large-scale transmission lines - should also be avoided.

screening for additional sensitive resources and values, consideration of which should be included in the EIS7.

### Maximizing Use of Impaired Lands and Existing Infrastructure

N-004-018 In addition to avoiding ecologically-sensitive lands, we recommend that already impaired lands be considered first for siting the SLV Transmission Project. Existing ROWs, degraded agricultural lands, and other already impacted areas provide opportunities for siting transmission lines without the loss of other uses and values. Such sites are often close to existing infrastructure, which provides additional benefits. Proximity to existing infrastructure will minimize new road construction or major roadway improvements (such as paving and widening), avoiding another set of impacts to lands, soil and vegetation resources.

### Possible Mitigation Strategies

N-004-019 We recognize that the SLV Transmission Project has the possibility of providing significant benefits by facilitating renewable energy development and thus reducing greenhouse gas emissions from electricity production. Importantly, however, even if the most sensitive landscapes, watersheds and scenic areas are avoided, it is inescapable that there will be impacts. These impacts should be minimized and mitigated as much as possible, using best management practices, the best available technology, and innovative strategies.

> RUS should strive in this precedent-setting process that will lead to transmission for renewable energy, to protect the natural resource areas whether on federal, state, public, private or tribal lands. In order for the agencies to rely on mitigation to reduce potentially significant impacts, NEPA requires that the agencies make a firm commitment to mitigation and discuss the mitigation measures "in sufficient detail to ensure that environmental consequences have been fairly evaluated. ..." See Communities, Inc. v. Busey, 956 F.2d 619, 626 (6th Cir. 1992). NEPA defines "mitigation" of impacts (at 40 C.F.R. § 1508.20) to include:

- Avoiding the impact altogether by not taking a certain action or parts of an action;
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation:
- Rectifying the impact by repairing, rehabilitating, or restoring the affected
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or
- Compensating for the impact by replacing or providing substitute resources or environments.

RUS must "analyze the mitigation measures in detail [and] explain how effective the measures would be . . . A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA." See Northwest Indian Cemetery Protective Association v. Peterson, 764 F.2d 581, 588 (9th Cir. 1985), rev'd on other grounds 485 U.S. 439 (1988).

9

# N-004-018: Route Refinement (In Review)

Your email/letter/comment form has been received and your comment noted. Route refinement for the proposed project and mitigation measures will be addressed in the Environmental Impact Statement. The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-019: Environmental Consequences (In Review)

Your email/letter/comment form has been received and your comment noted. Potential environmental consequences and mitigation measures from the proposed project will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

We are providing the GIS data for this analysis with our scoping comments (via email) as well as on a CD under separate cover (via U.S. first class mail).

Require the Use of Best Management Practices and Innovative Technologies to Minimize Impacts

N-004-020 RUS and the cooperating/permitting agencies should require the use of best management practices and innovative technologies to minimize impacts. For the preliminary corridors identified particularly the highly scenic stretch between Ft. Garland and La Veta Pass – RUS should rigorously explore opportunities to minimize impacts, including, but not limited to:

- Keeping the right of way as far south of Highway 160 as possible, while at the same time assessing and minimizing impacts to homes, subdivisions and the approximate 8,000 subdivided but undeveloped housing lots in the area.
- Using low stature poles made of natural wood or corten steel where crossing open vegetation and flat terrain; e.g., existing 230 kV towers in the area are on 90 to 100 foot wooden poles that have far less visual impacts than the proposed 115 to 150 foot towers.
- · Using tall mono poles made of corten steel where crossing through woodland or forest, and retaining shorter stature trees underneath the lines to the greatest practicable extent.
- Investigating the possibility of removing existing local poles and using the new ones for local lines where possible to lessen cumulative visual impacts.
- Using the railroad grade instead of following Highway 160 to get across La Veta Pass. We note that at one point in time, this was a potential corridor for locating the power line rightof-way; RUS needs to fully discuss the potential to utilize this corridor and cost-benefits compared to other routing options.

N-004-021 In addition, RUS should thoroughly examine other best management practices and mitigation strategies including those identified in the Final PEIS for West-wide Energy Corridors (Chapter 2.4), completed in 2009 by the Departments of Energy and Interior.

> (http://corridoreis.anl.gov/eis/guide/index.cfm#vol1). After BMPs and innovative mitigation technologies are examined and fully analyzed, RUS should develop and commit to specific mitigations strategies in the EIS. Mitigation measures must be mandatory and based on credible science. These strategies will only work if they are mandatory and are specific to the challenges for this Project.

### Burying Lines in Key Places

Underground transmission lines could be used to avoid impacts from large-scale transmission development along the SLV Transmission Project route. Underground segments carefully planned for cost-effectiveness and feasibility at a site-specific level have the potential to maintain natural landscapes while facilitating the development of location-constrained renewable generation far from N-004-022 load centers. Where consistent with environmental goals such as conservation of soil quality and plant life, the option to bury transmission lines should be considered where lines pass through high quality viewsheds or sensitive wildlife habitat of birds and/or bats.

While undergrounding Extra High Voltage (EHV) lines poses some additional technical challenges related to reactive power management and resistive heat losses, these can ultimately met through appropriate compensation and increased conductor cross-sections/conductivities. Ultimately, the

10

# N-004-020: Environmental Consequences (In Review)

Your email/letter/comment form has been received and your comment noted. Potential environmental consequences and mitigation measures from the proposed project will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-021: Environmental Consequences (In Review)

Your email/letter/comment form has been received and your comment noted. Potential environmental consequences and mitigation measures from the proposed project will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-022: Project Alternatives (In Review)

Your email/letter/comment from has been received and your comment noted. A range of reasonable project alternatives and mitigation measures including the no action alternative will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

Overview of the Potential for Undergrounding the Electricity Networks in Europe, Report for the European Commission. ICF Consulting, 2003. http://ec.europa.eu/energy/gas\_electricity/studies/doc/electricity/2003\_02\_underground\_cables\_icf.pdf.

technical hurdles associated with installing underground lines are cost and engineering issues, not fundamental constraints. Furthermore, if underground portions are limited to short distances where impact is most acute, additional compensation requirements can be minimized or eliminated. The targeted undergrounding of critical paths would also greatly protect critical species and viewsheds.

N-004-023 Several technologies exist for undergrounding EHV lines. Some underground EHV systems involve placing three conductors in a large underground pipe that is filled with pressurized oil for insulation due to thermal considerations. Above ground pressure stations are erected at frequent intervals along the path to maintain pressure. A breach of the underground system is not only extremely difficult to locate, but could have severe environmental impacts, leaking pressurized oil into the earth and groundwater. For these reasons, careful analysis of potential impacts from both running lines above and below ground will be necessary to determine which option is more environmentally sensitive. A report by Argonne National Laboratory, The Design, Construction, and Operation of Long-Distance High-Voltage Electricity Transmission Technologies (p. 57), explores the potential environmental costs and benefits from burying transmission lines. Other technologies may help limit these risks. Underground lines can also be insulated with gas or crosslinked polyethelene (XPLE), which may pose fewer potential environmental risks. These alternatives and mitigation strategies should be studied in the EIS.

N-004-024 Accordingly, RUS should consider the option of requiring construction of underground transmission lines where proposed rights-of-way pass through sensitive wildlife habitat, viewsheds and wherever possible to maintain the natural character of the desert landscape. RUS should carefully consider the impacts on soil and plant life that underground transmission lines may impact, as well as any potential impacts from leaks or spills from the underground system. RUS should study the potential impacts of both burying lines (including analysis of all available technologies for burying lines, including but not limited to oil cooled, gas cooled, and XPLE insulated lines) and keeping them above ground, weigh the pros and cons of these alternatives, and make recommendations in the EIS for the most environmentally sensitive alternative.

N-004-025 Finally, RUS should perform an in-depth analysis weighing the potential costs of requiring best management practices and cutting edge mitigation techniques against the benefits they confer. Ultimately, transmission costs are born by ratepayers. In many instances, a higher cost per mile of transmission or MW-hr of delivered energy might be justified compared to the economic and environmental benefits. Many areas in Colorado, including the San Luis Valley, are incredibly rich in natural resources that are spurring a growing tourist and recreational-based economy. Higher costs to properly avoid, minimize and mitigate environmental impacts will go a long way in preserving these economic benefits. In addition, not all benefits from the best protection of Colorado's outstanding natural resources are easily quantifiable - e.g., what is the value of a Rocky N-004-026 Mountain sunset view without power lines in the foreground? In its cost-benefit analysis, the EIS must thoroughly examine quality of life and other socio-economic attributes than can be more fully preserved by requiring state-of-the-art yet cost-effective mitigation measures.

11

# N-004-023: Project Alternatives (In Review)

Your email/letter/comment from has been received and your comment noted. A range of reasonable project alternatives and mitigation measures including the no action alternative will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-024: Project Alternatives (In Review)

Your email/letter/comment from has been received and your comment noted. A range of reasonable project alternatives and mitigation measures including the no action alternative will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-025: Environmental Consequences (In Review)

Your email/letter/comment form has been received and your comment noted. Potential environmental consequences and mitigation measures from the proposed project will be addressed in the Environmental Impact Statement.

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at

http://www.usda.gov/rus/water/ees/ea.htm.

# N-004-026: Environmental Consequences (In Review)

Your email/letter/comment form has been received and your comment noted. Potential environmental consequences and mitigation measures from the proposed project will be addressed in the Environmental Impact Statement.

<sup>&</sup>lt;sup>9</sup> Important Factors Affecting Underground Placement of Transmission Facilities. American Electric Power. http://www.aep.com/about/i765project/docs/UGvsOVHDPaper.pdf.

### IX. Conclusion

Western Resource Advocates and the undersigned are committed to renewable energy development and the necessary transmission investments to develop and deliver these important, clean energy resources to consumers. To obtain Colorado's New Energy Economy goals, and the net environmental benefits associated with these clean, renewable energy resources, we must acknowledge that there will be impacts, including impacts from transmission, wherever sited, constructed and maintained. Transmission projects for renewable energy will need to gain public support throughout the region. Key to obtaining wide-spread support and buy-in necessary for renewable energy and transmission projects to be built, is a full analysis and demonstration: (1) that the project is needed after consideration of demand-side resources; (2) alternatives are examined to locate transmission in already-impacted areas including the potential to upgrade existing facilities; (3) the proposed transmission project will primarily support renewable energy and be limited to low-carbon generation sources; and (4) impacts to lands, wildlife, scenic and other resource values are analyzed, disclosed and avoided/minimized with a full analysis and requirement of state-of-the-art mitigation technologies. RUS should take the opportunity in this precedent-setting NEPA analysis to rigorously explore all of these principles.

Sincerely,

Tom Darin, Energy Transmission Attorney Western Resource Advocates 2260 Baseline Rd., Suite 200 Boulder, CO 80302 contact: Vicky Mandell, WRA vmandell@westernresources.org

Josh Pollock, Conservation Director Center for Native Ecosystems 1536 Wynkoop St, Ste 303 Denver, CO 80202 josh@nativeecosystems.org Veronica Egan, Executive Director Great Old Broads for Wilderness P.O. Box 2924 Durango, CO 81302 egan.veronica@gmail.com

Suzanne Jones, Regional Director Colorado Regional Office The Wilderness Society 1660 Wynkoop St., Suite 850 Denver, CO 80202 suzanne\_jones@tws.org

Amy Mall, Senior Policy Analyst
Natural Resources Defense Council
1918 Mariposa Avenue
Boulder, CO 80302
amall@nrdc.org

The Environmental Impact Statement is anticipated to be completed in late 2010 and will be available at http://www.usda.gov/rus/water/ees/ea.htm.

12

### Appendix A: Potential Habitat and Species Conflicts to be Addressed in the EIS

We are encouraged to see that Tri-State has already completed some screening for sensitive resources and values which could be impacted by the SLV Transmission Project in their Macro Corridor Studies (MCSs). Center for Native Ecosystems (CNE) and The Wilderness Society (TWS) have completed a GIS analysis to screen for additional resources and values which RUS should carefully analyze in the EIS. RUS should also identify and require implementation of strategies to minimize impacts to these resources, along with mitigation for any impacts which are unavoidable.

This appendix includes two sections. Section I recognizes the work which has already been completed to identify key resources and values in the MCSs which may be impacted by the SLV Transmission Project. Section II includes the results of additional screens applied by CNE and TWS which should be addressed in the EIS, including identification of medium and high-sensitivity resources which may be impacted by the SLV Transmission Project. RUS should prioritize efforts to avoid and minimize impacts to the resources and values in Sections I and II in the EIS because of their sensitivity and importance. GIS data of the Section II resources and values clipped to the SLV Transmission Project area is also included with these comments (Attachment A)<sup>1</sup>.

Key resources and values identified in the SLV Transmission Project MCSs

The MCSs for the SLV Transmission Project break the project into two parts: the Calumet to Comanche segment and the San Luis Valley to Calumet and Calumet to Walsenburg segments. A separate MCS has been prepared for each of these segments. These MCSs include the results of important analysis of impacts to sensitive resources and values.<sup>2</sup>

**Recommendation:** Because of their sensitivity and importance, RUS should prioritize efforts to analyze, avoid and minimize impacts to the resources and values identified in the MCS in the EIS.

II. Additional sensitive resources to be addressed in the EIS

CNE and TWS have completed a GIS analysis to screen for additional resources and values which RUS should carefully analyze in the EIS. The results of this screen, including identification of medium and high-sensitivity resources, are identified in the tables below, and GIS data of these resources and values (clipped to the SLV Transmission Project Area) are included with these comments (Attachment A). The medium and high sensitivity results are broken out by SLV Transmission Project corridor segment. The remaining results are simply

(http://www.tristategt.org/Transmission/sanluisvalley/documents/SanLuisValleyESIP MCS.pdf)

<sup>&</sup>lt;sup>1</sup> Some data, including Colorado Natural Heritage Program (CNHP) Element Occurrence Records, is confidential and cannot be included in Attachment A. We recommend that RUS obtain this data from CNHP for use in developing the EIS.

<sup>&</sup>lt;sup>2</sup> Calumet-Comanche Transmission Project Macro Corridor Study p. 3-13 to 3-18. (http://www.tristategt.org/Transmission/sanluisvalley/documents/Calumet-to-Comanche-Macro-Coridor-Study July-2009.pdf); San Luis Valley Electric System Improvement Project Alternative Evaluation and Macro Corridor Study p. 4-19 to 4-22.

listed here, without identification of which segment they overlap with – however, the GIS data included with these comments (Attachment A) is clipped to the SLV Transmission Project area, so RUS can easily identify which corridor segments intersect with which sensitive resource or value. We recommend that RUS use the GIS data in Attachment A to supplement their analysis for the EIS.

Table 3. Additional sensitive resources to be addressed in the EIS – high sensitivity, Calumet to Comanche

Corridor Segment	Key Sensitive Resources and Values
Н	Crosses greenback cutthroat trout stream
J	Crosses greenback cutthroat trout stream
K	Crosses greenback cutthroat trout stream
L	Crosses greenback cutthroat trout stream

Table 4. Additional sensitive resources to be addressed in the EIS – medium sensitivity, Calumet to Comanche

Corridor Segment	Key Sensitive Resources and Values
J	Near a prairie falcon observation
L	CNHP Potential Conservation Area (PCA) – Vigil
	and St. Vrain (B3) <sup>3</sup>
N	CNHP PCAs – Vigil and St. Vrain(B3), Huerfano
	River at Cedarwood(B4)
O	CNHP PCAs – Vigil and St. Vrain(B3), Huerfano
	River at Cedarwood(B4); State Wildlife Area – St.
	Charles; CNHP Element Occurrence Records -
	vulpes velox (swift fox)
V	Greenhorn Creek at I-25(B3)
Y	State Wildlife Area – St. Charles
All segments	Swift fox overall range

Table 5. Additional sensitive resources to be addressed in the EIS – high sensitivity, San Luis Valley

Corridor Segment	Key Sensitive Resources and Values
H3	Crosses Rio Grande cutthroat trout stream
0	Crosses Rio Grande cutthroat trout stream;
	Gunnison's prairie dog overall range (CDOW)
Q	Travels along and crosses two Rio Grande
	cutthroat trout streams; Gunnison's prairie dog
	overall range (CDOW)
R	Travels along two Rio Grande cutthroat trout
	streams; Gunnison's prairie dog overall range

<sup>&</sup>lt;sup>3</sup> Biodiversity significance: B2 = very high; B3 = high; B4 = moderate

	(CDOW)
	(CDOW)
S	Crosses Rio Grande cutthroat trout stream
T	Gunnison's prairie dog active colonies (Colorado
	Division of Wildlife (CDOW)); Gunnison's prairie
	dog overall range (CDOW); crosses Rio Grande
	cutthroat trout stream
U	Gunnison's prairie dog active colonies (CDOW);
	Gunnison's prairie dog overall range (CDOW)
V	CNHP Element Occurrence Record – cleome
	multicaulis (slender spiderflower); Gunnison's
	prairie dog active colonies (CDOW); Gunnison's
	prairie dog overall range (CDOW)
KK	BLM Area of Critical Environmental Concern
	(ACEC) – Blanca; Gunnison's prairie dog overall
	range (CDOW)
W1	BLM ACEC – Blanca; Gunnison's prairie dog
	active colonies (CDOW); Gunnison's prairie dog
	overall range (CDOW)
X1	BLM ACEC – Blanca; Gunnison's prairie dog
	active colonies (CDOW); CNHP Element
	Occurrence Record – cleome multicaulis (slender
	spiderflower); Gunnison's prairie dog overall
	range (CDOW)
X2	CNHP Element Occurrence Record – cleome
mad0 - 10	multicaulis (slender spiderflower); Gunnison's
	prairie dog overall range (CDOW)
I,K,L,M,N,H1,H2,S,Y,Z,	Gunnison's prairie dog overall range (CDOW)
W2,AA,BB,CC1,DD,CC2,LL,EE,FF	

Table 6. Additional sensitive resources to be addressed in the EIS – medium sensitivity, San Luis Valley

Corridor Segment	Key Sensitive Resources and Values
G	Lynx potential habitat (CDOW); Swift fox overall
	range
I	Lynx potential habitat (CDOW); Swift fox overall
	range
J	Lynx potential habitat (CDOW); Swift fox overall
	range
P	Near a northern goshawk observation
Q	CNHP PCA – Sangre de Cristo Creek(B2)
R	CNHP PCA – Sangre de Cristo Creek(B2)
T	CNHP PCA – Sangre de Cristo Creek(B2)
U	CNHP PCA – Blanca Greasewood Flats(B3)
V	CNHP PCAs – Blanca Greasewood Flats(B3),
	Hansen Bluffs Seeps(B3); near two Willow

	flycatcher observations
X	Identified Colorado Natural Area – Medano Zapata
H1	CNHP PCA – Farista Dike(B3); Swift fox overall
	range
KK	CNHP PCA – Blanca Wetlands(B2); Identified
	Colorado Natural Area – Medano Zapata
X1	CNHP PCA – Blanca Wetlands(B2)
X2	CNHP PCA – Blanca Wetlands(B2); Identified
	Colorado Natural Area – Medano Zapata
W2	CNHP PCA – Blanca Wetlands(B2)
EE	CNHP PCA – Rio Grande(B3)
FF	CNHP PCA – Rio Grande(B3)
Segments A,C,D,E,F,K,LM,N	Swift fox overall range

Table 7. Additional sensitive resources to be addressed in the EIS

Colorado Division of Wildlife Data shows that one or more of the proposed transmission
corridors overlaps with the following habitat types:
elk migration patterns
pronghorn migration patterns
bighorn sheep mineral lick
bighorn sheep overall range
bigorn sheep severe winter range
bighorn sheep summer range
bighorn sheep winter concentration area
bighorn sheep winter range
black-tailed prairie dog overall range
elk highway crossings
elk migration corridors
elk overall range
elk production area
elk severe winter range
elk summer concentration
elk summer range
elk winter concentration area
elk winter range
greenback heron foraging area
mountain lion human conflict area
mountain lion overall range
mule deer concentration area
mule deer critical winter range
mule deer highway crossing
mule deer overall range
mule deer resident population area
mule deer severe winter range

mule deer summer range
mule deer winter concentration area
mule deer winter range
osprey foraging area
pronghorn concentration area
pronghorn overall range
pronghorn resident population area
pronghorn winter concentration
pronghorn winter range
scaled quail concentration area
scaled quail overall range
turkey overall range
turkey winter concentration area
turkey winter range
American white pelican foraging area
American white pelican foraging area
white-tailed deer concentration area
white-tailed deer overall range
GIS Data from various sources shows that one or more of the proposed transmission
corridors overlaps with the following habitat/sensitive resources:
Colorado Natural Heritage Program Networks of Conservation Areas - Playa Lake and Arkansas
Valley Barrens
Southern Rockies Wildlands Network Design top linkages (2)
Southern Rockies Wildlands Network Design elk movement corridor
Southern Rockies Wildlands Network Design wildlife movement corridor - bear and wolf
dispersal
Southern Rockies Wildlands Network Design wildlife movement corridor - waterfowl and raptor
habitat
Several Nature Conservancy Ecoregional Plan Portfolio Sites

Note: there are also a number of Colorado Natural Heritage Program element occurrence records and/or observations for birds (Southwest willow flycatcher, American white pelican, western snowy plover, Wilson's phalarope, white-faced ibis) that don't directly overlap with the SLV Transmission Project area, but are nearby. Thus, there is some potential for these species to experience impacts.

<u>Recommendations:</u> Because of their sensitivity and importance, RUS should prioritize efforts to analyze, avoid and minimize impacts to the resources and values identified in Section II in the EIS. Special care should be taken to avoid and minimize impacts to resources and values of medium and high sensitivity.